



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,700	10/22/2001	Jeffrey James O'Brien	10041-3	3769

7590 02/05/2003

ExxonMobile Chemical Company
P.O. Box 2149
Baytown, TX 77522

EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
----------	--------------

1771

6

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/014,700

Applicant(s)

O'BRIEN ET AL.

Examin r

Hai Vo

Art Unit

1771

-- Th MAILING DATE of this communication app ars on th cov r sh et with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

1. Claims 1-10 are objected to because of the following informalities: Claim 1, line 2, the comma right after "biaxially stretched" should be deleted.

Claim 4, line 2, the phrase "one surface of the film to the other surface to the film" needs to be changed to -- one surface to the other surface of the film--.

Claim 10, the claim dependency is missing. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, it is not clear whether a porous membrane is made from a combination of HDPE resin, HDPE fiber and a cavitating agent or a blend of HDPE resin and a cavitating agent wherein a stretching of the membrane provides a meshed network of HDPE fibers. In addition, line 3, the phrase "particles of an incompatible material" is confusing because with what the material, or how the material supposed to be incompatible is undefined.

Double Patenting

4. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 09/778,558. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following

reasons. Claims 1-10 of copending Application No. 09/778,558 encompass the instant claims of the present invention with an additional limitation of a surface layer being a porous ink receiving layer with interconnecting voids.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, and 3-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mrozinski (US 4,726,989). Mrozinski discloses a article comprising a coating, microporous sheet material having an extruded, biaxially stretched film of high density polyethylene (HDPE) incorporated with a nucleating agent wherein the microporous sheet material has a network of micropores being connected to each other by fibrils (abstract, column 11, lines 57-60, column 12, lines 28-30, and column 18, lines 55-60). The microporous sheet material itself can be a laminate of other sheet materials to provide a composite structures which include the microporous sheet material (column 12, lines 38-42). Likewise, it is clearly apparent that the microporous sheet material is completely porous from one surface to other surface of the film. The microporous sheet material has a void content of at least 20% (table III). The microporous sheet material is porous in a direction perpendicular to the

plane of the article (column 11, lines 25-35). The microporous sheet material is useful as a filter or a battery separator (column 12, lines 49-51). The microporous sheet material is comprised of HDPE having the molecular weight of 160,000, a melt index of 0.07 and a standard Saybolt viscosity of 360-390 at 38°C (column 18, lines 55-60, column 19, line 8). Since Mrozinski is using the same HDPE material having the molecular weight meeting the specific range set out in the claims as Applicants, it is the examiner's position that the melt index and intrinsic viscosity would be inherently present.

With regard to claim 3, It is the examiner's position that the article of Mrozinski is identical to the claimed article prepared by the method of the claim, because both articles are made from the same materials, HDPE and a nucleating particle, having structural similarity (a surface layer/a porous membrane). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Mrozinski reference anticipates the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-

Art Unit: 1771

obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Mrozinski.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mrozinski (US 4,726,989) in view of Su et al (US 5,885,721). Mrozinski fails to teach CaCO₃ being a nucleating agent. Su teaches a biaxially oriented, stretched multilaminar film of high density polyethylene comprising CaCO₃ as a nucleating agent (column 14, line 30). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ CaCO₃ as a nucleating agent because of its commercial availability and economical advantage.
9. Claims 1, and 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagi et al (US 5,650,451) in view of Gutierrez-Villarreal (US 5,756,577). Yagi discloses a biaxially oriented film from high molecular weight polyethylene and inorganic filler having a gas permeable structure comprising random-arranged microfibrils and void content of from 20 to 70%, an intrinsic viscosity of at least 5 dl/g (abstract, column 5, lines 1-10). Yagi discloses the film can be used for lamination

(abstract) and porous in a direction perpendicular to the plane of the article (column 12, line 13 et seq.). Yagi also teaches the film being useful as a filter or a battery separator (column 15, lines 53-55). Yagi is silent as to high density polyethylene. Gutierrez-Villarreal teaches a biaxially oriented film made from a blend of styrene-butadiene copolymer and polyolefin wherein polyolefin can be high density polyethylene or high molecular weight polyethylene (column 3, lines 35 and 39). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace high molecular weight polyethylene by high density polyethylene to form a film because of its commercial availability and economical advantage. Since Yagi as modified by Gutierrez-Villarreal is using the same material to form the film structure as Applicants, i.e., HDPE having an intrinsic viscosity, a void content meeting the specific range set out in the claims, it is the examiner's position that the melt index and molecular weight properties would be inherently present.

With regard to claim 3, Yagi teaches the surface of the film can be treated with plasma (column 15, line 16). However, Yagi does not specially disclose the temperature at which the film is treated. It is the examiner's position that the laminate of Yagi as modified by Gutierrez-Villarreal is slightly different than the claimed film structure prepared by the method of the claim, because both articles are made from the same materials, HDPE and a cavitating agent, having structural similarity (a surface layer/a porous membrane and a meshed network of HDPE microfibrils). Even though product-by-process claims are limited by and defined by

the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Yagi and Gutierrez-Villarreal references strongly suggest the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Yagi/ Gutierrez-Villarreal.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagi et al (US 5,650,451) in view of Gutierrez-Villarreal (US 5,756,577) as applied to claim 1 above, further in view of Su et al (US 5,885,721). The combination of the primary and secondary references fails to teach CaCO₃ being a nucleating agent. Su teaches a biaxially oriented, stretched multilaminar film of high density polyethylene comprising CaCO₃ as a nucleating agent (column 14, line 30). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ CaCO₃ as a nucleating agent because of its commercial availability and economical advantage.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426.

The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
January 23, 2003


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700